

Short paper

## ***Acleris kochiella* (Goeze) (Lepidoptera: Tortricidae: Tortricinae), a new record from Iran**

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**Abstract:** *Acleris kochiella* (Goeze) collected in Gilan and Golestan Provinces and preserved in the Hayk Mirzayans Insect Museum (HMIM) of the Iranian Research Institute of Plant Protection (IRIPP) was identified during the study of Tortricidae material of the Lepidoptera collection. This species is newly reported for the fauna of Iran. A brief diagnosis of the species is provided.

**Keywords:** Tortricidae, Tortricinae, *Acleris kochiella* (Goeze), Iran, new record

### **Introduction**

The genus *Acleris* Hübner, [1825], with 261 described species worldwide is one of the 97 genera of the tribe Tortricini (Tortricidae, Tortricinae) (Gilligan *et al.*, 2014). Tegumen armed with dorsal or lateral prominences and ventro-terminal process of anal tube in the male genitalia are known autapomorphies of the genus (Razowski, 2002). The *Acleris* species are extremely variable in markings and coloration. Larvae are oligophagous on representatives of 109 plant families (Razowski, 2002). The genus is known from all regions excluding Australia, but most species are Holarctic (Razowski, 2002). As far as eight species namely, *Acleris forsskaleana* (Linnaeus, 1758), *A. hastiana* (Linnaeus, 1758), *A. lacordairana* (Duponchel, 1936) [the subspecies *A. l. caucasica* Filipjev, 1962], *A. lorquiniana* (Duponchel, 1835), *A. napaea* (Meyrick, 1912), *A. rhombana* ([Denis & Schiffermüller], 1775), *A. sparsana* ([Denis & Schiffermüller], 1775) and *A. variegana*

([Denis & Schiffermüller], 1775) are reported from Iran so far which are most common in the Northern Provinces (Razowski, 1963, 2002; Abivardi, 2001; Wieser *et al.*, 2001; Alipanah, 2009).

During the study of unidentified Tortricinae material preserved in the Hayk Mirzayans Insect Museum (HMIM) of the Iranian Research Institute of Plant Protection (IRIPP), a male and a female of *Acleris kochiella* collected in Astara (Gilan Province) and Tang-e Gol (Golestan Province), respectively were found. This species is new to the fauna of Iran.

### **Materials and Methods**

The adult specimens were collected by using light traps. Genitalia dissections followed Robinson (1976). Photographs were taken using a digital Still camera DSC-F717 and a Dino-Eye Microscope Eye-piece camera. Some images are the result of combining multiple images using the software Combine ZP. The collected specimens have been deposited in the HMIM.

### **Results**

The examined and determined adult specimens are briefly described as follows:

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***Acleris kochiella* (Goeze, 1783)**

Material examined: 1 ♂ Gilan Prov., Āstārā, Hazelnut Research Station, N 37° 07' 32.8", E 049° 11' 19.4", 28 m, 30.vi.2008, Nematīān, Ālipanāh leg.; 1 ♀, Golestān Prov., Golestān National Park, Tang-e Gol, N 37° 22' 14.7", E 055° 56' 00.0", 718 m, 6.ix.2009, Ālipanāh, Buszko leg.

**Diagnosis-** Wingspan 15-18 mm (those of the examined male and female 12.5 mm and 14.5 mm, respectively); seasonal dimorphism distinct, the summer generation (examined specimens) with white ground color of the forewing suffused with grey or yellowish together with brownish markings, and brownish creamy hindwing (Fig. 1A); while in the autumn generation, ground color of the forewing is grey sprinkled with black-grey, with dark grey, black grey or ill defined markings and brownish hindwing. The cilia of both fore-and hindwings of the autumn generation contrary to

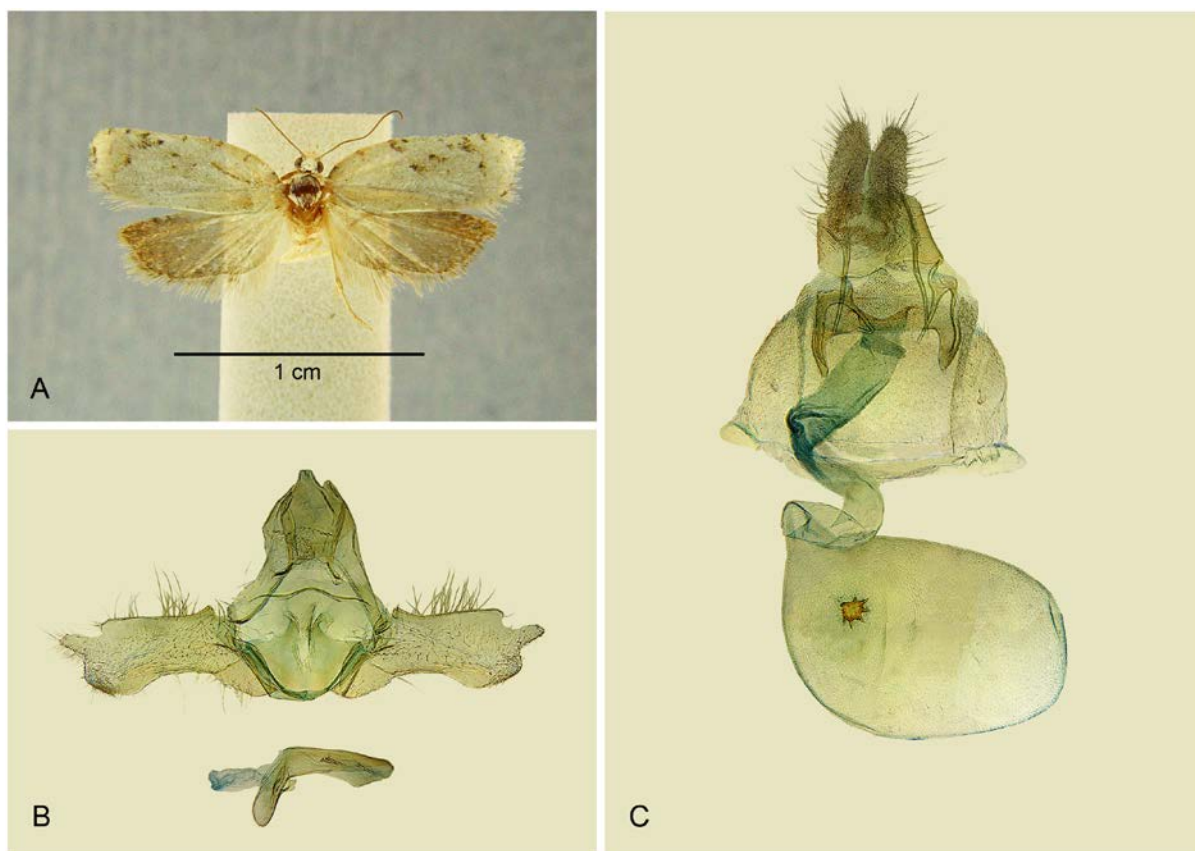
the whitish cilia of summer generation, almost grey (Razowski, 2002).

In the genitalia of examined male, base of the hairy socius long but not narrow and cornuti as three nearly equally sized spines (Fig. 1B). In the single dissected female, postero-median margin of sterigma distinctly projected outwardly and ductus bursa nearly of the same width throughout its length (Fig. 1 C).

**Biology-** The larvae feed on *Ulmus* species on folded or spun leaves (Kimber, 2015).

**Distribution-** This species is distributed in the Palearctic Region including most parts of Europe, Siberia, Russian Far East, Kazakhstan Ural region, Irkutsk and China (Razowski, 2002; Kimber, 2015).

**Remark-** This is the first report of this species from Iran.



**Figure 1.** *Acleris kochiella* (Goeze), adult and genitaliae. A) Adult female; B) Male genitalia; C) Female genitalia.

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## اولین گزارش *Acleris kochiella* (Goeze) (Lep., Tortricidae, Tortricinae) از ایران

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**چکیده:** طی مطالعه نمونه های Tortricidae موجود در موزه حشرات هایک میرزایانس مؤسسه تحقیقات گیاه پزشکی کشور گونه *Acleris kochiella* (Goeze) که از استان های گیلان و گلستان جمع آوری شده و در موزه نگهداری می شود، شناسایی شد. این گونه برای اولین بار از ایران گزارش می شود. در این مقاله این گونه به اختصار معرفی شده است.

**واژگان کلیدی:** Tortricidae، Tortricinae، *Acleris kochiella* (Goeze)، ایران، گزارش جدید